

ORDER NO. KM40212005C1

J01

Service Manual

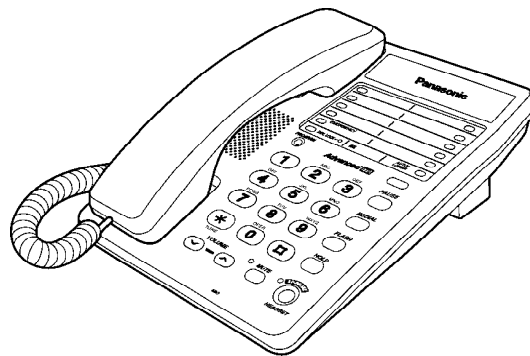
Telephone Equipment

KX-TS105B

Integrated Telephone System

Black Version

(for U.S.A.)



SPECIFICATIONS

■ SPECIFICATIONS

Power Source:	Telephone line voltage
Dial Speed:	Tone(DTMF)/Pulse(10pps)
Redial:	Last dialed telephone number
Speaker Unit:	5.7cm (2.5") PM magnetic type 32Ω Handset; 3 cm (1 ¹³ / ₁₆) PM dynamic type, 150Ω
Microphone:	Electret condenser microphone
Input Jack:	Telephone Line, Data port
Dimensions:	6 ⁹ / ₁₆ " × 8 ¹³ / ₁₆ " × 3 ³ / ₄ " (167 × 224 × 95 mm)
Weight:	1.46 lbs. (660g)

Design and specifications are subject to change without notice.

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WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

When you note the serial number, write down all 11 digits. The serial number may be found on the bottom of the unit.

FOR SERVICE TECHNICIANS

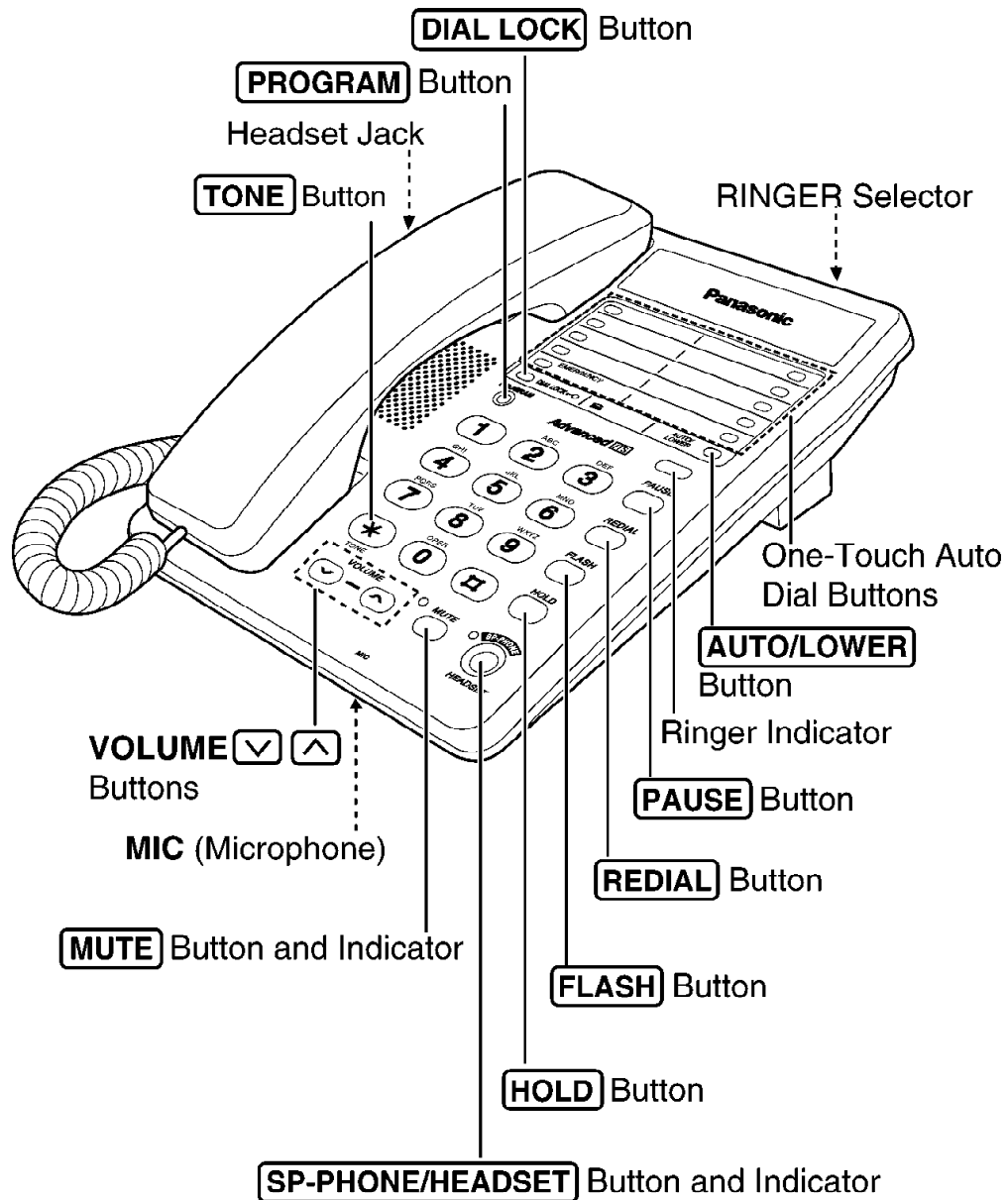
ICs and LSIs are vulnerable to static electricity.

When repairing, the following precautions will help prevent recurring malfunctions.

1. Cover plastic parts boxes with aluminum foil.
2. Ground the soldering irons.
3. Use a conductive mat on worktable.
4. Do not grasp IC or LSI pins with bare fingers.

Panasonic

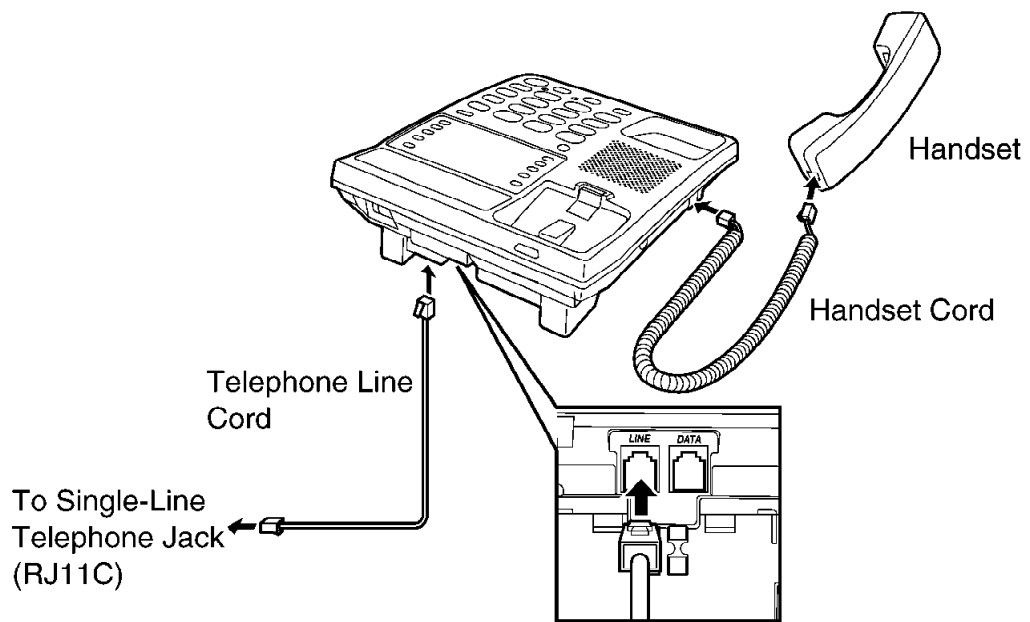
1. LOCATION OF CONTROLS



2. CONNECTION

2.1. Connecting the Handset/Telephone Line Cord

After connection, lift the handset to check for a dial tone.

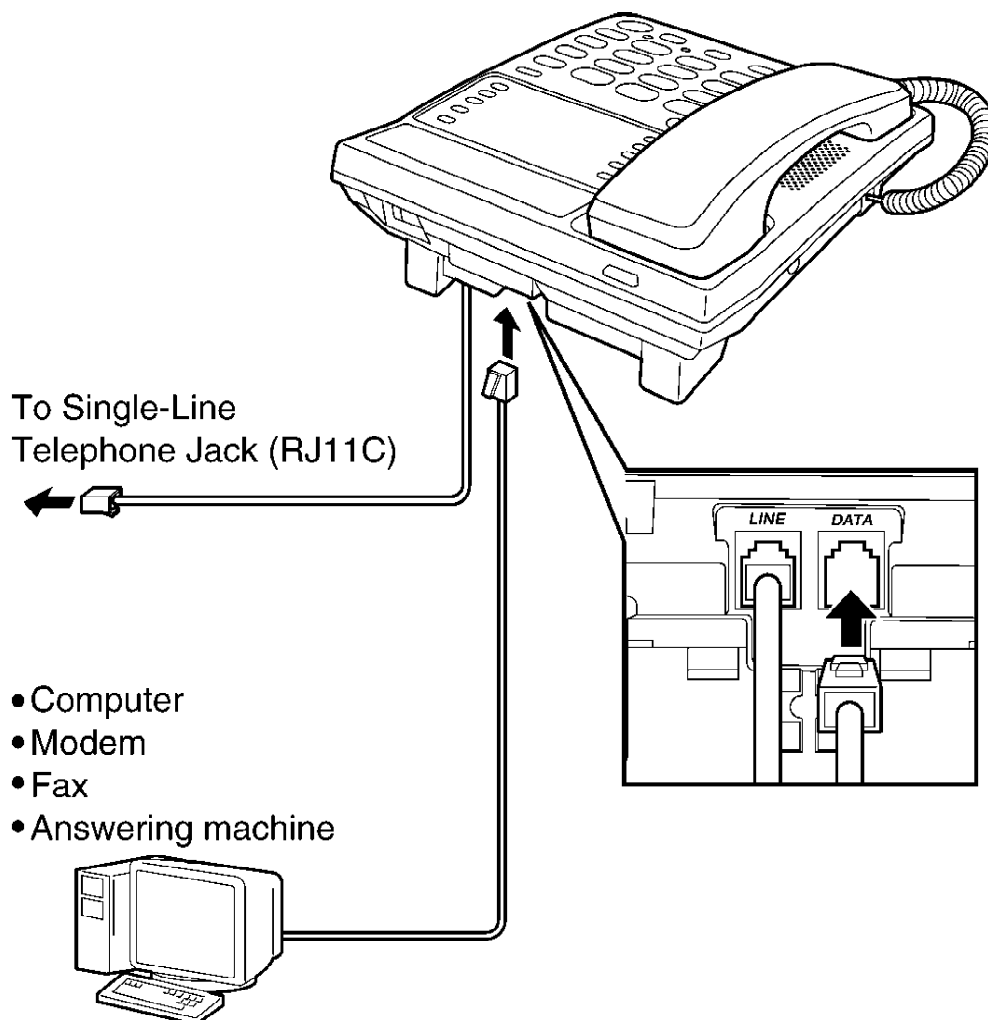


- Use only a Panasonic Handset for the KX-TS105B.

2.2. Connecting a Communication Device

If you connect a communication device (computer, modem, fax, answering machine, etc.) to the telephone line, you can connect it through this unit using the DATA jack.

After connecting the handset and telephone line cord, connect the communication device telephone line cord to the DATA jack.



- Make sure the communication device is not in use before using this unit (making calls, storing phone numbers in memory etc.) or the communication device may not operate properly.

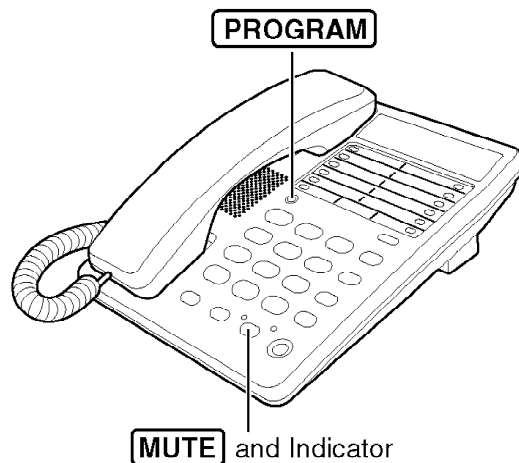
3. SETTINGS

3.1. Dialing Mode

You can select the dialing mode by programming. If you have touch tone service, set to "Tone". If rotary or pulse service is used, set to "Pulse". Your phone comes from the factory set to "Tone".

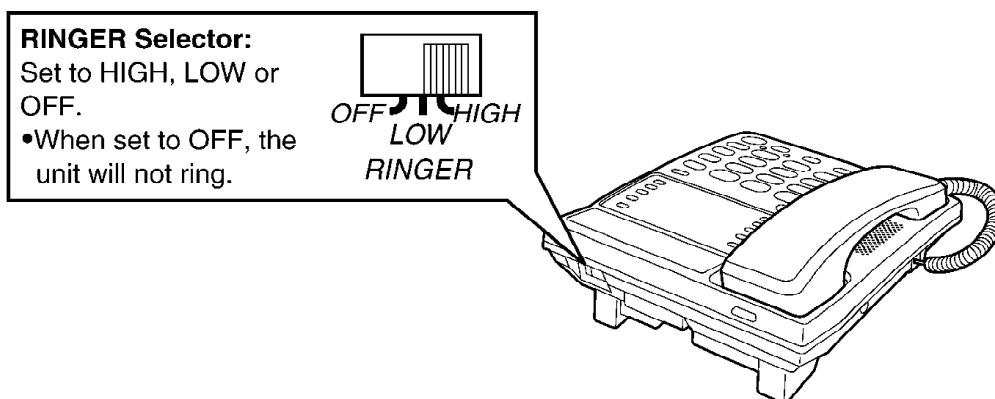
Make sure that a call is not put on hold.

- 1 Press **PROGRAM**.
 - The MUTE indicator flashes.
- 2 Press **MUTE**.
- 3 Press **3**.
- 4 To select "Pulse", press **2**.
or
To select "Tone", press **1**.
- 5 Press **PROGRAM**.
 - A long beep sounds.
 - The MUTE indicator light goes out.
 - The unit will return to the standby mode.



3.2. Ringer Volume

You can select the ringer volume to HIGH, LOW or OFF. Your phone comes from the factory set to HIGH.



4. SPECIAL FEATURES

4.1. FLASH Button

Pressing **FLASH** allows you to use special features of your host PBX such as transferring an extension call or accessing special telephone services (optional) such as call waiting.

4.2. Selecting the Flash Time

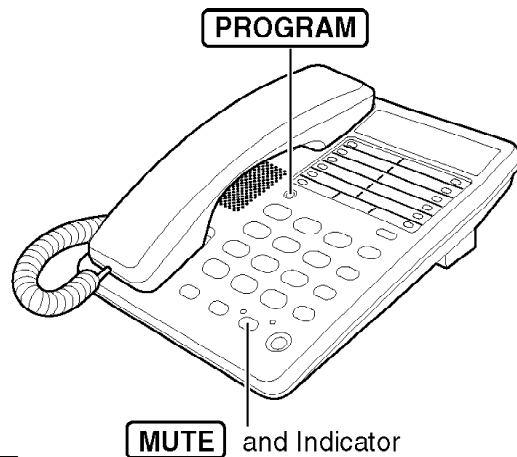
The flash time depends on your telephone exchange or host PBX. You can select the following flash times: "80, 90, 100, 110, 200, 250, 300, 400, 600, 700 ms (milliseconds)". Your phone comes from the factory set to "600 ms".

Make sure that a call is not put on hold.

1 Press **PROGRAM**.
The MUTE indicator flashes.

2 Press **MUTE**.

3 Press **2**.



4 Press a dialing button (**1** to **0**).

1 : 80 ms	2 : 90 ms	3 : 100 ms	4 : 110 ms
5 : 200 ms	6 : 250 ms	7 : 300 ms	8 : 400 ms
9 : 600 ms	0 : 700 ms		

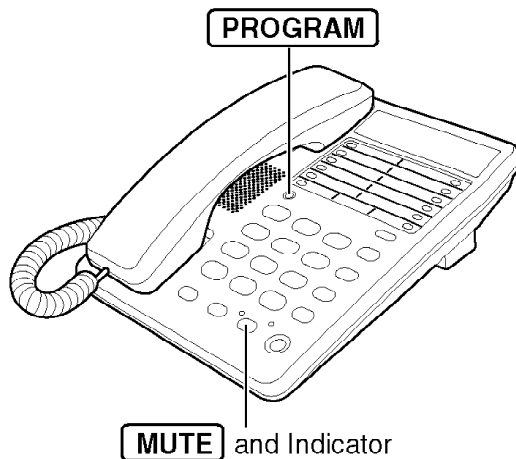
5 Press **PROGRAM**.
•A long beep sounds.
•The MUTE indicator light goes out.
•The unit will return to the standby mode.

- If you are connected via a PBX, a longer flash time may be necessary to use PBX functions (transferring a call, etc.). Consult your PBX installer for the correct setting.

4.3. PIN Code

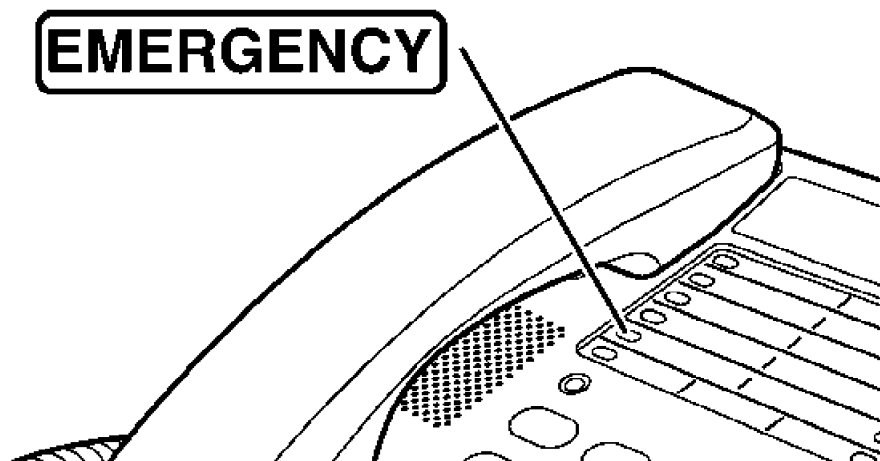
A 4-digit PIN Code (Personal Identification Number) prevents unauthorized persons from using your unit. The PIN Code is required for the dial lock and call restriction to be set or canceled. The factory preset PIN code is "1111".
Make sure that a call is not put on hold.

- 1 Press **PROGRAM** .
 - The MUTE indicator flashes.
- 2 Press **MUTE** .
- 3 Press **5** .
- 4 Enter the current PIN code.
- 5 Press **PROGRAM** .
 - If a correct PIN code is entered, a beep will sound.
 - If a wrong PIN code is entered, 3 beeps will sound. Enter the correct PIN code and press **PROGRAM** .
 - To return to the standby mode, lift the handset and hang up.
- 6 Enter a new PIN code using a 4-digit number.
- 7 Press **PROGRAM** .
 - A long beep sounds.
 - The MUTE indicator light goes out.
 - The unit will return to the standby mode.



4.4. Dial Lock

You can prevent others from making a call to any number except the one pre-programmed in the memory of the **EMERGENCY** button. Once you locked the dialing buttons, even emergency numbers cannot be dialed. Only incoming calls are accepted until the dial lock is canceled. Before using this feature, we recommend storing an emergency number in the memory of the **EMERGENCY** button. Even if the dialing buttons are locked, the number stored in the button can be dialed.



- If you choose not to program emergency numbers, but plan to use the dial lock, any number programmed into the EMERGENCY button can be accessed.

4.4.1. To Set the Dial Lock

- 1 Press **DIAL LOCK** .
 - The MUTE indicator flashes.
- 2 Enter the PIN code.
- 3 Press **PROGRAM** .
 - A long beep sounds.
 - If a wrong PIN code is entered, 3 beeps will sound. Enter a correct PIN code and press **PROGRAM** .
 - The MUTE indicator light goes out.
 - The unit will return to the standby mode.

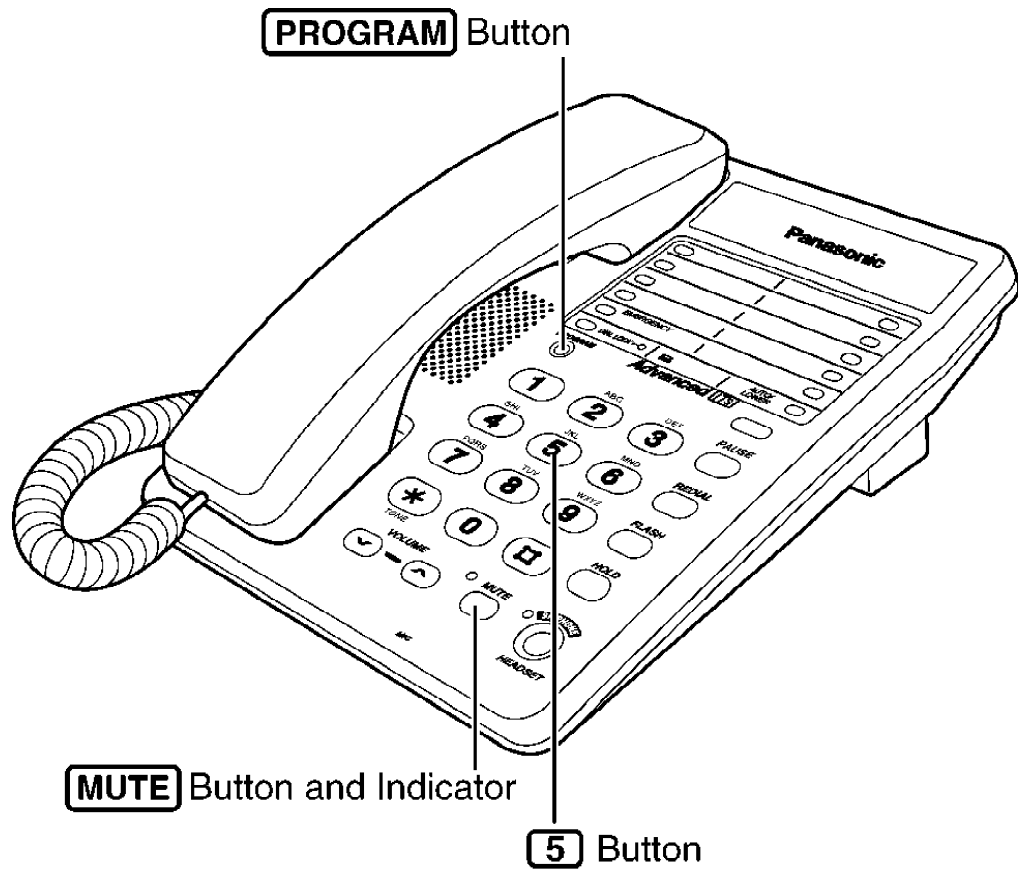
You can use the following features while the dialing buttons are locked.

- Dialing a number you programmed into the memory of the EMERGENCY button.
- Adjusting the handset and speakerphone volumes.
- Muting the conversation.
- Answering the second call by pressing **FLASH** .

4.4.2. To Cancel the Dial Lock

Follow steps 1 through 3 above again.

4.4.3. To Release the Establishment of Dial Lock



After this procedure, you will be able to establish a new password.
How to release the establishment of dial lock.

1. Press **PROGRAM** .  **MUTE LED Flashing.**

2. Press **MUTE** .

3. Press **5** .

4. Enter "10349276" for initialling of password.

5. Press **PROGRAM** .

6. Enter a new password 4 digits code
by dial key pad (ex. "1234").

7. Press **PROGRAM** .  **MUTE LED OFF.**

After this procedure, the password for
"DIAL LOCK" will be returned to "1 2 3 4".

8. To cancel the Dial Lock,
follow **To Cancel the Dial Lock.**

4.5. Call Restriction

You can prevent the unit from dialing phone numbers beginning with specified digit(s) (1 digit or 2 digits). Phone numbers with the restricted leading digits cannot be dialed out.

4.5.1. To Set the Call Restriction

Make sure that a call is not put on hold.

1 Press **PROGRAM** .
•The MUTE indicator flashes.

2 Press **MUTE** .

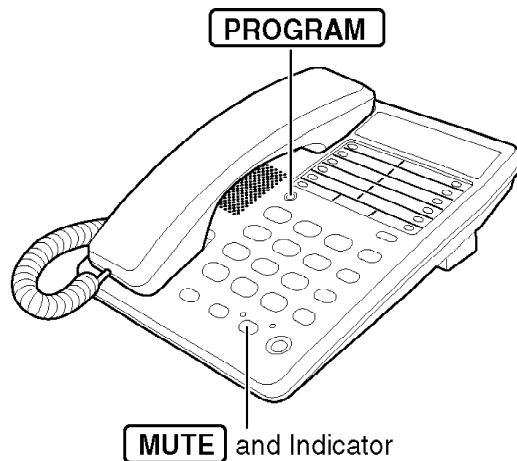
3 Press **1** .
•If you use “1111” as a PIN code (factory set), there is no need to enter a PIN code. Go to step 6.

4 Enter the PIN code .

5 Press **PROGRAM** .
•If a wrong PIN code is entered, 3 beeps will sound. Enter a correct PIN code and press **PROGRAM** .

6 Enter the number(s) (1 digit or 2 digits) you want to restrict (**0** to **9**) .
•If you enter a wrong number, enter a correct number.
•To change restricted digits from 2 digits to 1 digit, press ***** and enter 1 digit.

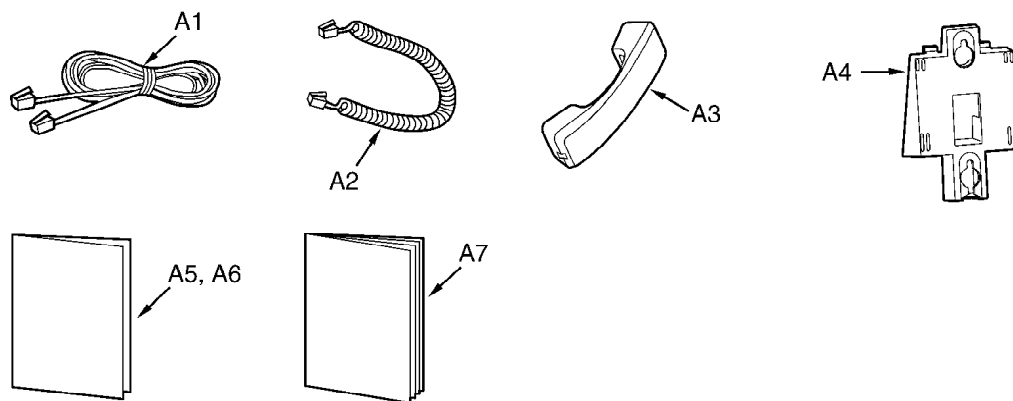
7 Press **PROGRAM** .
•A long beep sounds.
•The MUTE indicator light goes out.
•The unit will return to the standby mode.



**- If your unit is connected to a PBX, this function may not operate.
Contact your PBX supplier for more information.**

5. REPLACEMENT PARTS LIST

Ref. No.	Part No.	Part Name & Description	Pcs/Set
A1	PQJA10075Z	CORD, TELEPHONE	1
A2	PQJA212V	CORD, HANDSET	1
A3	PQJXC0301Z	HANDSET	1
A4	PQKL10038Y3	STAND, WALL MOUNT	1
A5	PQQW12497Z	QUICK GUIDE (for Spanish)	1
A6	PQQW12576Z	LEAFLET	1
A7	PQQX13158Y	INSTRUCTION BOOK	1



6. FOR SCHEMATIC DIAGRAM (**SCHEMATIC DIAGRAM**)

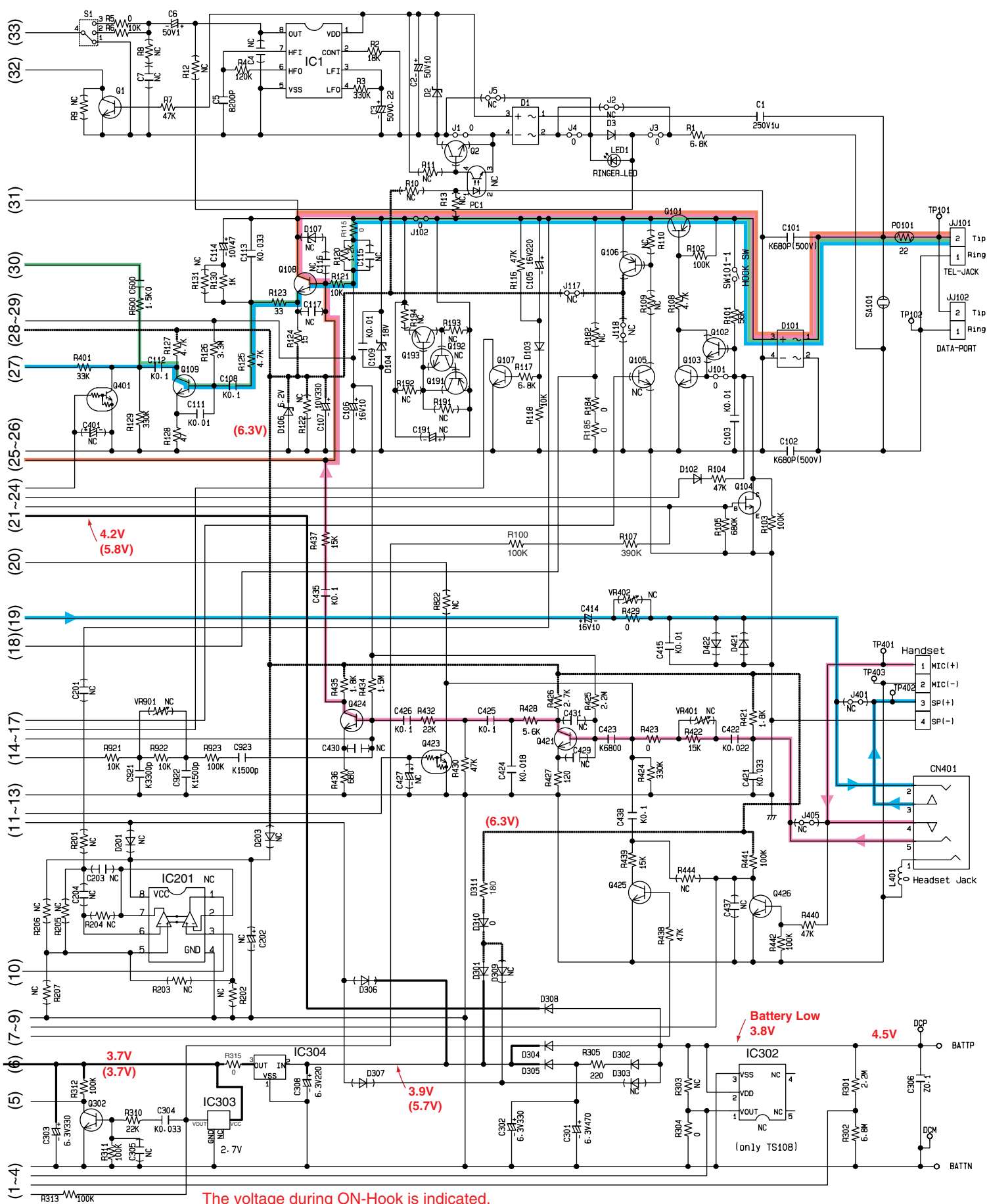
1. DC voltage measurements are taken with electronic voltmeter from negative terminal.
(Add 40 mA to telephone line from the loop simulator.)
2. This schematic diagram may be modified at any time with the development of new technology.

Important Safety Notice: / Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified parts.

6.1. Memo

7. SCHEMATIC DIAGRAM

H.M / KXTS105B



The voltage during ON-Hook is indicated.
() shows the voltage during OFF-Hook.

Handset & Headset Incoming Signal
Handset & Headset Outgoing Signal

Speaker Phone Incoming Signal
Speaker Phone Outgoing Signal

